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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,371	02/06/2004	Katsuhiro Aoki	248604US2	6791
22850	7590	07/27/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			TRAN, HOAN H	
			ART UNIT	PAPER NUMBER

2852

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.P

## Office Action Summary

Application No.

10/772,371

Applicant(s)

AOKI ET AL.

Examiner

Hoan H. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-10,13,14,19-23,25-27 and 31-38 is/are rejected.
- 7) ☒ Claim(s) 7,11,12,15-18,24 and 28-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>05/05/2004</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because it does not identify the citizenship of each inventor.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 3, lines 3-4, "to supply .... non-contact manner." is unclear.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4-6, 8, 10, 16/1, 16/2, 16/4, 16/5, 16/6, 16/8, 16/10, 19-25 and 31-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyaguchi et al. ['014]

Miyaguchi et al. disclose an image forming apparatus [Fig. 29] comprising a

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photoconductive drum [101] for bearing an electrostatic latent image, a toner hopper [131], an agitator [132], a supply roller [134], a recovery means [138], a developing roller [251] positioned close to an end of an electrostatic conveyance member [252] having a silicone-based resin on an upper surface [Col. 6, lines 8-11] and a plurality of electrodes [12] connected to different electrode terminals and configured to set up an electric field along the electrostatic conveyance member [Col. 5, line 38-55], and a power supply [Col. 6, lines 12-46] applying a voltage to the electrodes.

Regarding claims 1, 2, 4-6, 8, 10, 16/1, 16/2, 16/4, 16/5, 16/6, 16/8, 16/10, the claimed method step are inherent from the product structure.

***Claim Rejections - 35 USC § 103.***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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8. Claims 9, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyaguchi et al. in view of Muramatsu et al. ['298]

Miyaguchi et al., as discussed above, disclose the claimed invention except for a powder pump.

Muramatsu et al. disclose an image forming apparatus comprising a powder pump unit [72] and a tubing [60].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the image forming apparatus disclosed by Miyaguchi et al. with a powder pump unit as taught by Muramatsu et al. for the purpose of fluidizing and supplying toner to the toner hopper.

Regarding claim 9, the claimed method steps are inherent from the product structure.

9. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyaguchi et al. in view of Okamura et al. ['722]

Miyaguchi et al., as discussed above, disclose the claimed invention except for a toner having a spherical shape is used as the developer.

Okamura et al. disclose an image forming apparatus comprising a toner having a spherical shape and sphericity in a range from 0.9-1. [Col. 14, lines 8-13]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the image forming apparatus disclosed by Miyaguchi et al. with a toner having a spherical shape and sphericity in a range from 0.9-1. as taught by Okamura et al. so that the toner can slide and rotate more freely, thereby ensuring an effective charging of the toner.

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***Allowable Subject Matter***

10. Claims 7, 11, 12, 15-18, 24 and 28-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoan H. Tran whose telephone number is (571) 272-2141. The examiner can normally be reached from 8:30 AM - 5:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Arthur Grimley can be reached at (571) 272-2136. The central office fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

HHT  
July 24, 2005



**HOAN TRAN  
PRIMARY EXAMINER**